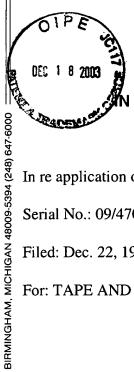
Docket N POS-01102/ In Application Of: Posa et al Serial No. Filling Date Examiner Group Art Uni 09/470,452 Dec. 22, 1999 H. Vo 1771 Invention: TAPE AND WRAPPING MATERIALS WITH EDGE-FINDING FEATURE TO THE COMMISSIONER FOR PATENTS: Transmitted herewith in triplicate is the Appeal Brief in this application, with respect to the Notice of Appeal filed or December 14, 2003 Applicant is a small entity under 37 CFR 1.9 and 1.27. A verified statement of small entity status under 37 CFR 1.27: is enclosed. has already been filed in this application. The fee for filling this Appeal Brief is: \$165.00 A check in the amount of the fee is enclosed. The Director has already been authorized to charge fees in this application to a Deposit Account. The Director is hereby authorized to charge any fees which may be required, or credit any overpayment to Deposit Account No. 67-1180	OIPE		<u></u>		Imag	eA
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Dated: Dec 15 2003			ees which ma	ay be required, or credit	any	
John G. Posa Reg. No. 37,424 Gifford, Krass, Groh et al 280 N. Old Woodward Ave., Suite 400 Birmingham, MI 48009 Tel. 734/913-9300 Fax 734/913-6007 Jet. 13, 2003 I certify that this document and fee is being deponent of the U.S. Postal Set first class mail under 37 C.F.R. 1.8 and is addresse Commissioner for Patents, P.O. Box 1450, Alexandre 22313-1450.	John G. Posa Reg. No. 37,424 Gifford, Krass, Groh et al 280 N. Old Woodward Ave. Birmingham, MI 48009 Tel. 734/913-9300		Dated:	on 3-15-03 first class mail under 37 C Commissioner for Patents	with the U.S. Posta C.F.R. 1.8 and is addr	al Service as ressed to the

cc:

Sheryl L. Hammer
Typed or Printed Name of Person Mailing Correspondence



THE UNITED STATES PATENT AND TRADEMARK OFFICE BOARD OF PATENT APPEALS AND INTERFERENCES

In re application of: Posa et al.

Serial No.: 09/470,452 Group No.: 1771

Filed: Dec. 22, 1999 Examiner: H. Vo

For: TAPE AND WRAPPING MATERIALS WITH EDGE-FINDING FEATURE

APPELLANTS' BRIEF UNDER 37 CFR §1.192

Mail Stop Appeal Brief Commissioner for Patents PO Box 1450 Alexandria, VA 22313-1450

Dear Sir:

I. **Real Party in Interest**

The real parties and interest in this case are John G. Posa and Ronald W. Citkowski, Applicants 12/22/2003 MDAMTE1 00000047 09470452 and Appellants.

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II. **Related Appeals and Interferences**

There are no appeals or interferences which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

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The present application was filed with 19 claims. Claims 1-8 were withdrawn from consideration after Appellants elected claims 9-19 for prosecution in response to an October, 2001 Restriction Requirement. Claims 9-19 were canceled and new claims 20-23 were added by amendment in May 2003. Accordingly, claims 20-23 are under appeal.

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280 N. OLD WOODWARD AVENUE, GIFFORD, KRASS, GROH, SPRINKLE, ANDERSON & CITKOWSKI, P.C.

V. Concise Summary of the Invention

STE. 400, BIRMINGHAM, MICHIGAN 48009-5394 (248) 647-6000

280 N. OLD WOODWARD AVENUE,

GIFFORD, KRASS, GROH, SPRINKLE, ANDERSON & CITKOWSKI,

This invention helps to solve problems in locating the free end or edge of tapes and other thin flexible materials through the use of a substance which causes the free end or edge to become a different color, or to glow, when cut or torn, but which does not significantly change the transparent nature of the tape (Specification, page 3, lines 5-8). In the preferred embodiment, the substance is contained within the flexible material itself, though one or more layers may be added to the material to carry the substance (Specification, page 3, lines 8-10).

The invention may be applied to various thin, flexible materials, including adhesive tapes, food wraps and other packaging materials, and is particularly advantageous when used in conjunction with transparent materials provided in roll form, where the free end of the material may stick to, or at least fall back onto, the outer surface of the roll, causing the edge to become otherwise difficult to locate (Specification, page 3, lines 11-16). The invention is particularly useful when applied to clear packing tapes, which tend to be extremely transparent, and are often provided without a dispenser (Specification, page 3, lines 16-17).

In an adhesive tape embodiment, the substance added to the material is preferably a daylight fluorescent additive, such as a fluorescein dye (Specification, page 3, lines 18-19). The backing material of the tape is preferably employed as a light pipe (Specification, page 3, lines 19-20). Ambient illumination enters into the tape and is wavelength-shifted by the fluorescent dye to a highly visible, preferably monochromatic or near-monochromatic illumination, which exits through the free edge of the tape, causing it to glow. To enhance this effect, the sides of the tape, particularly if supplied in roll form, may be coated with an opaque or reflective material, enhancing internal reflections within the backing material to enhance the exiting of light through the free end (Specification, page 3, line 20 to page 4, line 4). Also, one or more surfaces of the tape, or the adhesive, may be treated, or selected, to further enhance the scattering of light back into the tape (Specification, page 4, lines 4-6).

A wide variety of backing materials may be used in such an embodiment, including, but not limited to cellophane, vinyl, polyester, and the like (Specification, page 4, lines 7-8). Nor is the invention limited in terms of adhesive, and may exploit an entire range of adhesives from extremely tenacious to low-tack types of the kind used for Post-it® notes and tapes (Specification, page 4, lines 8-

BIRMINGHAM, MICHIGAN 48009-5394 (248) 647-6000 280 N. OLD WOODWARD AVENUE, STE. 400, SIFFORD, KRASS, GROH, SPRINKLE, ANDERSON & CITKOWSKI,

10). Different daylight-fluorescent materials besides fluoresceins may also be used, and such alternative materials will be readily apparent to one of skill in the art (Specification, page 4, lines 10-12).

In addition, as an alternative to the use of a light-carrying conduit, the substance used for edge-finding may be contained in microcapsules, such that when the tape or other material is cut or torn, the substance is exposed, causing it to fluoresce, become a different color, or otherwise become visually apparent; in some instances, as a result of interaction with oxygen, water, or other components of the ambient atmosphere. Thus, at least according to this embodiment, the invention is not limited to transparent or translucent materials (Specification, page 4, lines 13-19).

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- 1. Are claims 20 and 23 unpatentable under 35 U.S.C. §103(a) over U.S. Patent No. 5,474,194 to Heilman et al.?
- 2. Is claim 21 unpatentable under 35 U.S.C. §103(a) over U.S. Patent No. 5,474,194 to Heilman et al. as applied to claim 20, as evidenced by U.S. Patent No. 5,734,498 to Krasieva et al.?
- 3. Is claim 22 unpatentable under 35 U.S.C. §103(a) over U.S. Patent No. 5,474,194 to Heilman et al., as evidenced by U.S. Patent No. 5,866,249 to Yarusso?

VII. Grouping of Claims for Each Ground of Rejection Which Appellant Contends

The following groups of claims represent patentably distinct inventions which do not stand or fall together and should therefore be given independent consideration on appeal:

Group I: Claim 20;

Group II: - Claim 23;

Group III: - Claim 21; and

Group IV: Claim 22.

VIII. Argument

A. Group I - Claim 20

Claim 20 stands rejected under 35 U.S.C. §103(a) over what the Examiner is characterizing as

"the admitted prior art," in view of Heilman, U.S. Patent No. 4,747,194. The Examiner concedes that the "the admitted prior art" excludes the presence of a fluorescent material in the backing layer of an adhesive tape, but argues that it would have been obvious to include such material "to generate an irreversible color change at the edge of the tape when the tape is cut." This reasoning is misguided on several grounds. First, what the Examiner is characterizing as "obvious" reads directly on Appellants' point of novelty, and there is no teaching or suggestion from the prior art in support of the Examiner's proposed combination. Secondly, even if such combination were justified, Appellants' inventive tape does not "generate an irreversible color change at the edge of the tape when the tape is cut." Rather, the edge of Appellants' tape always "glows," such that when a new edge is created, either by cutting or tearing, that new edge simply glows in the same manner as the previous one.

According to the Examiner, "Heilman discloses a color change system including a brittle layer 44 formed of a 'flexible material' and being colored with a fluorescent die and a bonding layer 42 that bonds the brittle layer to the background coating 40 ..." (quotations added by Appellant). The Examiner's insertion of "flexible material" into the description of Heilman's brittle layer is unjustified and misleading. There is nothing flexible about the brittle layer of Heilman and, in fact, even with the slightest deformation (apparently of a few millimeters) the brittle layer of Heilman simply cracks up. This is entirely different from Appellants' disclosed backing layer, which may be composed of "plastic such as cellulose-based materials, vinyls, urethanes, polyesters, and the like now currently employed for both opaque and transparent tapes ..." (specification, lines 18-20). Moreover, the "adhesive" of Heilman is more like a hardening cement, preferably in the form of a varnish "bonding layer 42." ('194 patent, column 3, lines 38-44). Accordingly, the Examiner's statement that "the brittle layer of Heilman is simply analogous to the backing layer of the conventional tape whereas the bonding layer of Heilman is comparable to the adhesive layer," runs counter to accepted definitions and interpretation by anyone of skill in the art.

280 N. OLD WOÒDWARD AVENUE,

KRASS, GROH, SPRINKLE,

The Examiner concedes that neither the cited art discloses or suggests a phenomenon of internal reflection, but the Examiner seems to take "official notice" that such a limitation would be "inherent." The Examiner bases this reasoning on the presumption that "the adhesive tape of the admitted prior art as modified by Heilman appears to be structurally the same as the adhesive tape of the present invention." This is clearly untrue. The Heilman patent is directed to a closure incorporating an

irreversible color system, the closure including a brittle layer 44 which fractures and in part delaminates to indicate tampering. "The brittle layer 44 is formed of a brittle resin and should be a thermal set material that has proper fracturing and adhesion properties in order to work properly." ('194 patent, column 3, lines 45-47). Given that the teachings of Heilman include a brittle structure that cracks up or breaks apart as part of a tamper-evident container, there is no evidence whatsoever that an adhesive tape "modified by Heilman" would be structurally the same as Appellants' invention.

The Examiner points to the last paragraph of page 9 of Appellants' specification, wherein it is disclosed that when a tape is cut or torn, microcapsules of the fluorescent dye within the backing layer are broken ...; however, this is an embodiment of the invention which Appellants' are not presently claiming. In Appellants' invention as claimed, fluorescent material is included in the backing layer of a flexible, adhesive tape, such that there is no brittle layer that fractures, nor is there an irreversible color change.

B. Group II - Claim 23

280 N. OLD WOÓDWARD AVENUE

Claim 23 adds to claim 20 the limitation that the fluorescent material in the backing material of the tape is a fluorescein dye. In addition to all of the arguments set forth above with regard to the claim from which claim 23 depends, the Examiner makes absolutely no mention of this limitation. It is clear that Heilman is silent as to the fluorescent material used, or at least it is not a fluorescein dye, such that this claim is clearly allowable for a lack of an argument to the contrary.

C. Group III - Claim 21

Claim 21 adds to claim 20 the limitation that the amount of the fluorescent material is such that the white optical density is at least 90 percent, among other limitations. This claim stands rejected under 35 U.S.C. §103(a) over the "admitted prior art" in view of Heilman et al., "as evidenced by Krasieva et al. (the '498 patent). The Examiner concedes that the combination of the primary and secondary references fails to disclose or suggest the amount of fluorescent dye present in the backing layer. Not only is there no teaching or suggestion to combine Krasieva et al., this reference is taken from an entirely different common, non-analogous field of art, namely, the fabrication of illuminator elements for conventional light microscopes. As such, what Krasieva et al. has to say about optical

density is immaterial.

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280 N. OLD WOODWARD AVENUE.

GIFFORD, KRASS, GROH, SPRINKLE, ANDERSON & CITKOWSKI

It is well settled that in rejecting claims under 35 U.S.C. §103, the Examiner must provide a reason why one having ordinary skill in the pertinent art would have been led to modify the prior art, or to combine references, to arrive at Appellant's claimed invention. There must be something *in the prior art* that suggests the proposed modification, other than the hindsight gained from knowledge that the inventor choose to combine these particular things in this particular way. <u>Uniroyal Inc. v. Rudkin-Wiley Corp.</u>, 837 F.2d 1044, 1051, 5 USPQ2d 1434, 1438 (Fed. Cir. 1988). The Examiner is also required to make specific findings on a suggestion to combine prior art references. <u>In Re Dembeczak</u>, 175 F.3d 994, 1000-01, 50 USPQ2d 1614, 1617-19 (Fed. Cir. 1999). In this case, the Examiner's argument that it would have been obvious to meet the limitations of the claim of this group, since the discovery of "optimum or workable ranges involves only routine skill in the art," is without foundation. Whatever optimum or workable ranges might be present in the teachings of Krasieva et al. simply do not carry over to Appellants' invention, which is directed to an edge-tear apparent adhesive-backed tape.

D. Group IV - Claim 22

Claim 22 stands rejected under 35 U.S.C. §103(a) over the "admitted prior art" in view of Heilman et al. as evidenced by Yarusso et al. (the '249 patent). Claim 22 adds to claim 20 that the backing material comprises a polymer selected from a group of materials, none of which are disclosed in Heilman et al. To "cure this deficiency," the Examiner attempts to combine the teachings of Yarusso, but again, there is no teaching or suggestion to import the teachings from the '249 patent into the other references cited by the Examiner. Moreover, the use of the materials cited in Yarusso make no sense in the application of Heilman et al., since the point of novelty of the Heilman invention has to do with the realization of a brittle layer, utilizing thermoset and other materials disclosed by Heilman et al. Use of the flexible materials set forth by Appellants in this claim would render Heilman et al. unfit for its intended purpose.

Conclusion

In conclusion, for the arguments of record and the reasons set forth above, all pending claims of the subject application continue to be in condition for allowance and Appellant seeks the Board's concurrence at this time.

Date: Dec. 15, 2003

GIFFORD, KRASS, GROH, SPRINKLE, ANDERSON & CITKOWSKI, P.C. 280 N. OLD WOODWARD AVENUE, STE. 400, BIRMINGHAM, MICHIGAN 48009-5394 (248) 647-6000

Respectfully submitted,

John G. Posa

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APPENDIX A

CLAIMS ON APPEAL

20. An edge-indicating adhesive tape comprising:

a body of thin, flexible, backing material having a front surface, a back surface, and an edge extending therebetween, said backing material including a fluorescent material disposed therein, said fluorescent material being operable to absorb light of a first wavelength and emit light of a second wavelength different from said first wavelength, wherein said fluorescent material is disposed within the body of said backing material so that at least a portion of the light of said second wavelength is reflected from the front surface and the back surface of said backing material so as to exit from the edge thereof, whereby said light of said second wavelength makes said edge more visible than if said fluorescent material were absent from said backing material; and

a body of adhesive disposed on at least one of said front surface and said back surface of said backing material.

- 21. The adhesive tape of claim 20, wherein the amount of said fluorescent material disposed therein is such that the white light optical density of said body of backing material is at least 90% of what the white light optical density of said body of backing material would be in the absence of said fluorescent material.
- 22. The adhesive tape of claim 20, wherein said backing material comprises a polymer selected from the group consisting of: polyesters, polyvinyls, cellulosic polymers, polyvinylidenes, and combinations thereof.
 - 23. The adhesive tape of claim 20, wherein said fluorescent material is a fluorescein dye.

THE UNITED STATES PATENT AND TRADEMARK OFFICE BOARD OF PATENT APPEALS AND INTERFERENCES

In re application of: Posa et al.

Serial No.: 09/470,452

Group No.: 1771

Filed: Dec. 22, 1999

BIRMINGHAM, MICHIGAN 48009-5394 (248) 647-6000

Examiner: H. Vo

For: TAPE AND WRAPPING MATERIALS WITH EDGE-FINDING FEATURE

APPELLANTS' BRIEF UNDER 37 CFR §1.192

Mail Stop Appeal Brief Commissioner for Patents PO Box 1450 Alexandria, VA 22313-1450

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BIRMINGHAM, MICHIGAN 48009-5394 (248) 647-6000

280 N. OLD WOODWARD AVENUE, STE. 400.

GIFFORD, KRASS, GROH, SPRINKLE, ANDERSON & CITKOWSKI,

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280 N. OLD WOODWARD AVENUE, STE. 400, BIRMINGHAM, MICHIGAN 48009-5394 (248) 647-6000 SIFFORD, KRASS, GROH, SPRINKLE, ANDERSON & CITKOWSKI, P.C.

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MICHIGAN 48009-5394 (248) 647-6000

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According to the Examiner, "Heilman discloses a color change system including a brittle layer 44 formed of a 'flexible material' and being colored with a fluorescent die and a bonding layer 42 that bonds the brittle layer to the background coating 40 ..." (quotations added by Appellant). The Examiner's insertion of "flexible material" into the description of Heilman's brittle layer is unjustified and misleading. There is nothing flexible about the brittle layer of Heilman and, in fact, even with the slightest deformation (apparently of a few millimeters) the brittle layer of Heilman simply cracks up. This is entirely different from Appellants' disclosed backing layer, which may be composed of "plastic such as cellulose-based materials, vinyls, urethanes, polyesters, and the like now currently employed for both opaque and transparent tapes ..." (specification, lines 18-20). Moreover, the "adhesive" of Heilman is more like a hardening cement, preferably in the form of a varnish "bonding layer 42." ('194 patent, column 3, lines 38-44). Accordingly, the Examiner's statement that "the brittle layer of Heilman is simply analogous to the backing layer of the conventional tape whereas the bonding layer of Heilman is comparable to the adhesive layer," runs counter to accepted definitions and interpretation by anyone of skill in the art.

The Examiner concedes that neither the cited art discloses or suggests a phenomenon of internal reflection, but the Examiner seems to take "official notice" that such a limitation would be "inherent." The Examiner bases this reasoning on the presumption that "the adhesive tape of the admitted prior art as modified by Heilman appears to be structurally the same as the adhesive tape of the present invention." This is clearly untrue. The Heilman patent is directed to a closure incorporating an

irreversible color system, the closure including a brittle layer 44 which fractures and in part delaminates to indicate tampering. "The brittle layer 44 is formed of a brittle resin and should be a thermal set material that has proper fracturing and adhesion properties in order to work properly." ('194 patent, column 3, lines 45-47). Given that the teachings of Heilman include a brittle structure that cracks up or breaks apart as part of a tamper-evident container, there is no evidence whatsoever that an adhesive tape "modified by Heilman" would be structurally the same as Appellants' invention.

The Examiner points to the last paragraph of page 9 of Appellants' specification, wherein it is disclosed that when a tape is cut or torn, microcapsules of the fluorescent dye within the backing layer are broken ...; however, this is an embodiment of the invention which Appellants' are not presently claiming. In Appellants' invention as claimed, fluorescent material is included in the backing layer of a flexible, adhesive tape, such that there is no brittle layer that fractures, nor is there an irreversible color change.

B. Group II - Claim 23

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Claim 23 adds to claim 20 the limitation that the fluorescent material in the backing material of the tape is a fluorescein dye. In addition to all of the arguments set forth above with regard to the claim from which claim 23 depends, the Examiner makes absolutely no mention of this limitation. It is clear that Heilman is silent as to the fluorescent material used, or at least it is not a fluorescein dye, such that this claim is clearly allowable for a lack of an argument to the contrary.

C. Group III - Claim 21

Claim 21 adds to claim 20 the limitation that the amount of the fluorescent material is such that the white optical density is at least 90 percent, among other limitations. This claim stands rejected under 35 U.S.C. §103(a) over the "admitted prior art" in view of Heilman et al., "as evidenced by Krasieva et al. (the '498 patent). The Examiner concedes that the combination of the primary and secondary references fails to disclose or suggest the amount of fluorescent dye present in the backing layer. Not only is there no teaching or suggestion to combine Krasieva et al., this reference is taken from an entirely different common, non-analogous field of art, namely, the fabrication of illuminator elements for conventional light microscopes. As such, what Krasieva et al. has to say about optical

density is immaterial.

It is well settled that in rejecting claims under 35 U.S.C. §103, the Examiner must provide a reason why one having ordinary skill in the pertinent art would have been led to modify the prior art, or to combine references, to arrive at Appellant's claimed invention. There must be something *in the prior art* that suggests the proposed modification, other than the hindsight gained from knowledge that the inventor choose to combine these particular things in this particular way. <u>Uniroyal Inc. v. Rudkin-Wiley Corp.</u>, 837 F.2d 1044, 1051, 5 USPQ2d 1434, 1438 (Fed. Cir. 1988). The Examiner is also required to make specific findings on a suggestion to combine prior art references. <u>In Re Dembeczak</u>, 175 F.3d 994, 1000-01, 50 USPQ2d 1614, 1617-19 (Fed. Cir. 1999). In this case, the Examiner's argument that it would have been obvious to meet the limitations of the claim of this group, since the discovery of "optimum or workable ranges involves only routine skill in the art," is without foundation. Whatever optimum or workable ranges might be present in the teachings of Krasieva et al. simply do not carry over to Appellants' invention, which is directed to an edge-tear apparent adhesive-backed tape.

D. Group IV - Claim 22

Claim 22 stands rejected under 35 U.S.C. §103(a) over the "admitted prior art" in view of Heilman et al. as evidenced by Yarusso et al. (the '249 patent). Claim 22 adds to claim 20 that the backing material comprises a polymer selected from a group of materials, none of which are disclosed in Heilman et al. To "cure this deficiency," the Examiner attempts to combine the teachings of Yarusso, but again, there is no teaching or suggestion to import the teachings from the '249 patent into the other references cited by the Examiner. Moreover, the use of the materials cited in Yarusso make no sense in the application of Heilman et al., since the point of novelty of the Heilman invention has to do with the realization of a brittle layer, utilizing thermoset and other materials disclosed by Heilman et al. Use of the flexible materials set forth by Appellants in this claim would render Heilman et al. unfit for its intended purpose.

Date: Dec. 15, 2003

Conclusion

In conclusion, for the arguments of record and the reasons set forth above, all pending claims of the subject application continue to be in condition for allowance and Appellant seeks the Board's concurrence at this time.

Respectfully submitted,

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APPENDIX A

CLAIMS ON APPEAL

20. An edge-indicating adhesive tape comprising:

a body of thin, flexible, backing material having a front surface, a back surface, and an edge extending therebetween, said backing material including a fluorescent material disposed therein, said fluorescent material being operable to absorb light of a first wavelength and emit light of a second wavelength different from said first wavelength, wherein said fluorescent material is disposed within the body of said backing material so that at least a portion of the light of said second wavelength is reflected from the front surface and the back surface of said backing material so as to exit from the edge thereof, whereby said light of said second wavelength makes said edge more visible than if said fluorescent material were absent from said backing material; and

a body of adhesive disposed on at least one of said front surface and said back surface of said backing material.

- 21. The adhesive tape of claim 20, wherein the amount of said fluorescent material disposed therein is such that the white light optical density of said body of backing material is at least 90% of what the white light optical density of said body of backing material would be in the absence of said fluorescent material.
- 22. The adhesive tape of claim 20, wherein said backing material comprises a polymer selected from the group consisting of: polyesters, polyvinyls, cellulosic polymers, polyvinylidenes, and combinations thereof.
 - 23. The adhesive tape of claim 20, wherein said fluorescent material is a fluorescein dye.